AMENDMENTS TO THE CLAIMS

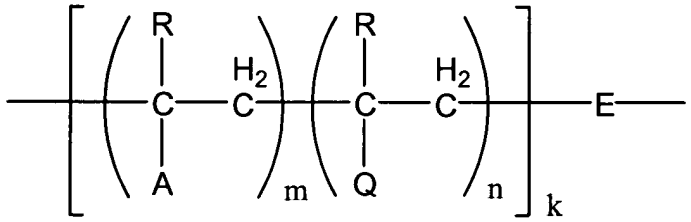
Claim 1 (Original): A copolymer comprising:

a polyethylene segment which is a main chain;

a reactive silicon-containing group which is a side group of the polyethylene segment; and

a polycondensation segment bonded to the polyethylene segment, which is a part of the main chain together with the polyethylene segment or a side chain with respect to the polyethylene segment.

Claim 2 (Original): A copolymer comprising a repeating unit represented by the following formula



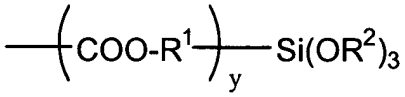
wherein, A is a reactive silicon-containing group, R is each independently a hydrogen atom or an alkyl group having 1 to 8 carbon atoms, Q is a group compatible with the reactive silicon-containing group, E is a polycondensation segment which is a part of a main chain, or a polyethylene segment having a polycondensation segment as a side chain, m is an integer of 1 or

more, n is an integer of 0 or 1 or more, and k is an integer of 1 or more.

Claim 3 (Original): A copolymer according to Claim 1 or 2, wherein said reactive silicon-containing group is an alkoxysilyl-containing group.

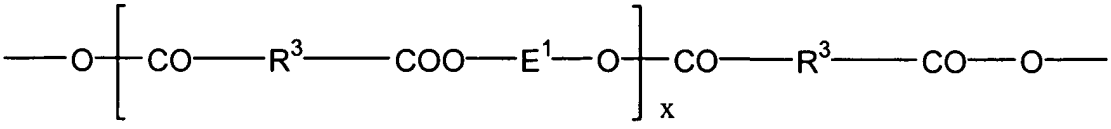
Claim 4 (Original): A copolymer according to Claim 1 or 2, wherein said polycondensation segment is a segment of polycarbonate, polyarylate or polysulfone.

Claim 5 (Original): A copolymer according to Claim 2, wherein said A has a structure represented by the following formula



wherein, R^1 is an alkylene group having 1 to 10 carbon atoms or an arylene group having 6 to 20 carbon atoms, R^2 is an alkyl group having 1 to 10 carbon atoms, and y is 0 or 1.

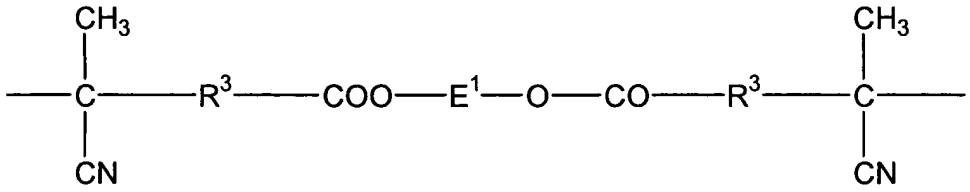
Claim 6 (Original): A copolymer according to Claim 2, wherein said E has a structure represented by the following formula



wherein, E^1 is a segment of polycarbonate, polyarylate or polysulfone, R^3 is each independently an alkylene group having 1 to

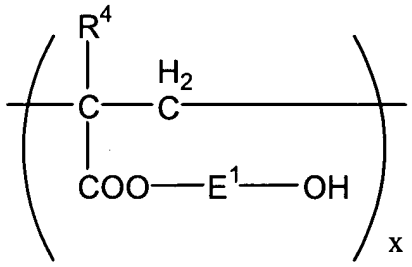
10 carbon atoms or an arylene group having 6 to 20 carbon atoms, and x is an integer of 1 or more;

or the following formula



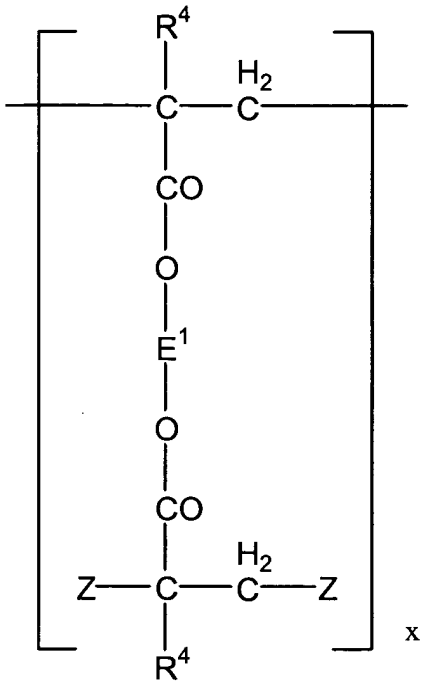
wherein, E^1 and R^3 are the same as defined above.

Claim 7 (Original): A copolymer according to Claim 2, wherein said E has a structure represented by the following formula



wherein, E^1 is a segment of polycarbonate, polyarylate or polysulfone, R^4 is a hydrogen atom or an alkyl group having 1 to 8 carbon atoms, and x is an integer of 1 or more;

or the following formula



wherein, E^1, R^4 and x are the same as defined above, and Z is each independently a segment of another polymer.

Claim 8 (Original): A copolymer according to Claim 2, wherein said Q is a hydrogen atom, a carboxyl group, an alkoxycarbonyl group having 1 to 9 carbon atoms, an alkyl group having 1 to 8 carbon atoms, an aryl group having 6 to 20 carbon atoms or a halogen atom.

Claim 9 (Original): A method of producing a copolymer according to Claim 1 or 2, comprising the step of radical-polymerizing a monomer mixture containing an unsaturated monomer having a reactive silicon-containing group and an unsaturated monomer compatible with said reactive silicon-containing group by using a macropolymerization initiator having a polycondensation segment.

Claim 10 (Original): A method of producing a copolymer according to Claim 1 or 2, comprising the step of radical-polymerizing a monomer mixture containing an unsaturated monomer having a reactive silicon-containing group, an unsaturated macromer having a polycondensation segment and an unsaturated monomer compatible with said reactive silicon-containing group.

Claim 11 (Currently Amended): A method according to Claim 9~~ or 10~~, wherein said reactive silicon-containing group is an alkoxysilyl-containing group.

Claim 12 (Currently Amended): A method according to Claim 9~~ or 10~~, wherein said polycondensation segment is a segment of polycarbonate, polyarylate or polysulfone.

Claim 13 (Currently Amended): A method of producing an organic-inorganic hybrid polymeric material, comprising the step of hydrolyzing and polycondensing the copolymer according to ~~any one of Claims 1 to 8~~Claim 1.

Claim 14 (Currently Amended): A method of producing an organic-inorganic hybrid polymeric material, comprising the step of

hydrolyzing and polycondensing the copolymer of ~~any one of Claims 1 to 8~~Claim 1 in the presence of a metal, a metal alkoxide compound, a metal oxide, a metal complex or an inorganic salt selected from the group consisting of Si, Ti, Zr, Al, Fe, Cu, Sn, B, Ge, Ce, Ta and W.

Claim 15 (Original): An organic-inorganic hybrid polymeric material produced by the method according to Claim 13 or 14.